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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | T. | |
|--|---------------------|----------------------|-------------------------|-----------------|
| 10/695,313 | 10/28/2002 | | ATTORNEY DOCKET NO. | CONFIRMATION NO |
| 10/075,515 | 10/28/2003 | Arya R. Behzad | 13432US06 | 2US06 4160 |
| 23446 | 7590 05/25/2004 | | | <u> </u> |
| MCANDREY | WS HELD & MALLOY LT | | EXAMINER | |
| MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET | |) | LE, DINH THANH | |
| SUITE 3400 CHICAGO, II | ~ 60661 | | ART UNIT | PAPER NUMBER |
| , n | | • | 2816 | |
| | | | DATE MAILED: 05/25/2004 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application N . Applicant(s) | | | | | |
|---------|---|--|---|---------------|--|--|--|
| | Office Action Summary | 10/695,313 | BEHZAD ET AL. | BEHZAD ET AL. | | | |
| | The state of Cananiary | Examiner | Art Unit | | | | |
| | - The MAILING DATE - 544 | DINH T. LE | 2816 | / | | | |
| | The MAILING DATE of this communication Period for Reply | appears on the cover sheet wit | h th correspondence address | | | | |
| | A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the me earned patent term adjustment. See 37 CFR 1.704(b). | R 1.136(a). In no event, however, may a re reply within the statutory minimum of thirty find will apply and will expire SIX (6) MONT | ply be timely filed (30) days will be considered timely. | | | | |
| | Status | | • | | | | |
| | 1) Responsive to communication(s) filed on | | | | | | |
| ٠- ا | | his action is non-final. | | | | | |
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| | Since this application is in condition for allow closed in accordance with the practice under the condition of the condition of the condition is in condition for allow closed in accordance with the practice under the condition of the condi | wance except for formal matter | s, prosecution as to the merits is | | | | |
| | | н <i>⊏х рапе Quayl</i> e, 1935 C.D. | 11, 453 O.G. 213. | | | | |
| | Disposition of Claims | | | | | | |
| | 4)⊠ Claim(s) <u>5-17</u> is/are pending in the application | on. | | 4.5 | | | |
| | 4a) Of the above claim(s) is/are withdr | rawn from consideration. | | | | | |
| | 5) Claim(s) is/are allowed. | | | | | | |
| | 6)⊠ Claim(s) <u>5-17</u> is/are rejected. | | | | | | |
| \cdot | 7)☐ Claim(s) is/are objected to. | · · | | | | | |
| | 8) Claim(s) are subject to restriction and | or election requirement | | | | | |
| | Application Papers | | | • | | | |
| | | | | | | | |
| | 9) The specification is objected to by the Examiner. | | | | | | |
| | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| | that any objection to the | e drawing(s) he held in abovenes | C 07 OFD 4 | | | | |
| | replacement drawing sheet(s) including the correct | ction is required if the drawing of the | | | | | |
| | 11) The oath or declaration is objected to by the E | xaminer. Note the attached O | ffice Action or form PTO-152 | | | | |
| 1 | Priority under 35 U.S.C. § 119 | | | | | | |
| | 12) Acknowledgment is made of a claim for forcing | | | | | | |
| | 12) Acknowledgment is made of a claim for foreigna) All b) Some * c) None of: | n priority under 35 U.S.C. § 11 | 9(a)-(d) or (f). | | | | |
| | 1. Certified copies of the priority document | ts have been received | | | | | |
| ļ. | 2. Certified copies of the priority document | ts have been received in Appli | | | | | |
| | 3. Copies of the certified copies of the prio | ority documents have been and | cation No | | | | |
| | application from the International Burea | u (PCT Rule 17 2/a)) | eived in this National Stage | | | | |
| | * See the attached detailed Office action for a list | of the certified copies not room | Sixod | | | | |
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| | ttachment(s) | and the second of the second o | to the second second to the second | | | | |
| 1) | Notice of References Cited (PTO-892) | 4) Interview Summ | ODY (DTO 440) | | | | |
| 2) | Notice of Draftsperson's Patent Drawing Pevious (BTO 040) | Paper No(s)/Ma | il Date | | | | |
| ٠, | Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 5) L Notice of Inform | al Patent Application (PTO-152) | | | | |
| S. F | Patent and Trademark Office | 6) Other: | | | | | |
| -10 | OL-326 (Rev. 1-04) | | | | | | |

DETAILED ACTION

Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections

Claim Rejections - 35 USC § 112

Claims 5-17are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction or clarification is required.

In claim 5, it is not understood what the "capacity" on line 3 is and how it can be in series with the ladder since the capacity is not an electronic component. The same is true for claim 16. The recitation "the first resistor" on line 4 and "the last resistance" on line 6 lacks clear antecedent basis and what the "last resistance" is. The description of the present invention is incomplete because the claimed filter does not have an input and an output. Thus, the claimed circuit may not perform the recited function.

In claim 6, it is not understood how the ground can comprise an AC ground, where it come from and how the DC ground can provide a DC bias.

In claim 11, it is unclear how the recitation "a MSFET device" is read on the preferred embodiment. Insofar as understood, no such device with the recited connections is seen on the drawings.

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In claim 15, it is unclear what the triode device is.

The remaining claims are dependent from the above claims and therefore also considered indefinite.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686; F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 5-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,731,160. Although the conflicting claims are not identical, they are not patentably distinct from each other because both invention discloses a filter circuit comprising:

- a high pass filter having a capacitor and a resistive ladder;
- a plurality of bandwidth adjusting resistances;
- a plurality of switches comprising MOSFETs; and
- a control circuit including a buffer amplifier.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-10 are rejected under 35 USC 103 (a) as being unpatentable over Katsuo (JP359018421) in view in view of Nabicht et al (US 6,621,346).

Figure 4 of Katsuo discloses a high pass filter circuit comprising a capacitor (3a), a resistor (3-0), switches (15-1 to 15-4) and resistors (3-1 to 3-4) but does not disclose that the resistor (3-0) is a series of resistors for providing taps and the switches (15-1 to 15-4) are the MOSFET. Noted that the position of the switches (15-1 to 15-4) and the resistors (3-1 to 3-4) does not change the performance of the filter. Nabicht et al teaches in Figure 5 a circuit comprising a series resistors (R1-R3, R11-R12) and MOSFET switches (S12', S23') for providing taps and saving power consumption. It would have been obvious to a person having skill in the art at the time the invention was made to employ the teaching of series connected resistors and the MOSFET switches taught by Nabicht et al in the circuit of Katsuo for the purpose of providing output taps and saving power consumption since it is well known in the art that the MOSFET is easily being fabricated on an IC and consumes less power.

With regard to claim 10, selecting the P-type MOSFET for the switch is considered to be a matter of design expedient for an engineer since the N-type MOSFET performs the same function as the P-type MOSFET.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DINH T. LE whose telephone number is (571) 272-1745. The examiner can normally be reached on Monday-Friday (8AM-7PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY CALLAHAN can be reached at (571) 272-1740.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DINH LE

Primary Examiner